

Permit Fact Sheet

General Information

Permit Number:	WI-0063347-03-1
Permittee Name:	Collins Sanitary Inc.
Address:	W9235 County Highway B
City/State/Zip:	Clinton WI 53525
Receiving Water:	Groundwaters of Turtle Creek Watershed in the Lower Rock River Basin via Land Application

Facility Description

Collins Sanitary Inc's (Collins) headquarters is located in Clinton, Wisconsin (Rock County). This facility provides short term storage and land application of industrial wastewater, industrial sludge, and septage (septage, holding tank, grease interceptor wastes) for numerous residential, business, commercial clients and industrial clients, as well as manure.

Collins has 46 fields (approximately 1,200 acres) approved for the land application of industrial, municipal, and mixed wastes. This permit covers mixing of waste in storage from multiple clients prior to land application. Requirements from multiple administrative codes may apply to mixed wastes. Monitoring requirements are established based on all applicable codes for the waste types that have been mixed together. Small volumes of manure are in all permitted storage structures (see storage structure summary below).

The permit covers the following mixed wastes:

- Industrial Wastes and Septage Wastes in Main Tank, Tank A (Illinois), Tank B (Illinois), and Pipping Tank
- Mix Industrial Wastes in Leach Tank

Depending on the mixed waste that is being land applied, each land application site/field must comply with ss. NR 113.07, NR 204.07, NR 214.17, and/or NR 214.18 Wis. Adm. Codes requirements for 1) separation distance from houses and wells, 2) separation distance from surface water and wetlands, 3) separation distance from bedrock and groundwater, and 4) soil permeability rate (sufficient to properly hold and treat the wastewater).

Winter time land application of industrial wastewater is permissible for sites/fields meeting the above conditions and that have slopes less than 2% or on a case by case basis 2-6%, per ss. NR 214.17(2)(f) and 214.18(2)(f), Wis. Adm. Codes. No winter land application is permitted for municipal sludge (biosolids), septage/holding tank/grease trap wastes, or mixed waste containing these wastes. When soil temperatures are above freezing, all land application is limited to slopes of 12% or less. Collins has approved sites/fields are located in Rock and Walworth counties. Collins land applied approximately 5.7MG (million gallons) on these sites in 2016.

Influent Clients

Collins may receive approval of additional new clients throughout the term of the permit by providing the required information shown in the New Waste Stream Requirements section of the WPDES permit. Collins will update the facility's land application management plan to reflect the addition of the new client(s).

Storage Structures

Collins owns one above ground slurry store ("Main Slurrystore" Outfall 001) located in Rock County, and at the time of this modification is constructing an above-ground concrete tank ("Pipping Tank" Outfall 015). Collins also leases three storage units in Wisconsin and Illinois (Leach Tank, Tank A, and Tank B). Before initiating a discharge from any of the designated tanks, the tanks shall be mixed and the contents analyzed for the required parameters. The results of the

analyses shall be used to establish the site loading rates until future analytical results are available. Collins must submit plans and specifications to the Department for review and approval, and this permit must subsequently be modified, prior to any new tank or storage structure being used to store wastes under this WPDES permit.

A sample point (outfall) has been designated for the tank to track the land application of wastes from that discharge location. Throughout this permit the term 'outfall' is used for any Sample Point number where the location is also a discharge point. Wastes are typically injected via drag line system on Department approved sites/fields.

Storage Structure Summary

Unit	Sample Point (Outfall)	Tank Type	Waste Stored	Capacity (Million Gallons)	TRS	Q/Q	Township	Manure Stored?
Main Slurrystore	001*	Above Ground Harvestore Slurrystore	Industrial +Septage	3.0 MG	1N, 13E, Section 36	SW SW	Turtle	Yes
Leach Tank	004	Above Ground Harvestore Slurrystore	Industrial	0.8 MG	2N, 13E, Section 17	SE SE	La Prairie	Yes
Tank A	011*	Above Ground Harvestore Slurrystore	Industrial +Septage	1.2 MG	Poplar Grove, IL**	NA	NA	Yes
Tank B	012*	Above Ground Harvestore Slurrystore	Industrial +Septage	0.8 MG	Poplar Grove, IL**	NA	NA	Yes
Pipping Tank	015*	Above Ground Concrete Tank	Industrial +Septage	5.5 MG	1N, 14E, Section 24,	NW SW	Clinton	Yes

*The Department has permitted the mixing and landspreading of wastewater (industrial + septage) from Main Tank (Outfall 001), Tank A (Outfall 011), Tank B (Outfall 012), and Pipping Tank (Outfall 015). Wastes from these storage units must be injected, satisfying the requirements of s. NR 113.07(d)(2) Wis. Adm. Code. In addition, no winter land application is approved for these outfalls.

** Tank A (Outfall 011) and Tank B (Outfall 012) are located in Illinois (Poplar Grove, IL). Because these units are located in Illinois, the department did not approve the plans/specifications for these units. However, the Department regulates the discharge of mixed wastes from Tank A and Tank B. This includes the discharge of these mixed wastes into Collins Main Tank as well as the landspreading of waste from these tanks on Wisconsin fields.

Direct Land Application Outfalls

Collins has the ability to directly land apply industrial waste under this WPDES permit. Collins must request approval of direct-land application outfalls prior to discharge. Wastewater is typically injected via drag line system on Department approved land application sites/fields.

Collins has requested the ability to directly land apply Class B municipal sludge (biosolids) for clients per s. NR 204.07 Wis. Adm. Code. Collins must submit characterization of the biosolids from new clients and receive approval from the

Department for spreading the biosolids before the sampling point(s) will be activated to authorize the landspreading. Winter land application is prohibited. The biosolids from only one municipal client may be applied on any given approved site. No industrial wastewater or industrial sludge may be applied to that site/field.

Other Methods of Disposal

Collins also hauls waste into Illinois. Waste hauled and disposed out of state is reported on the “Other Methods of Disposal” report (form 3400-052). Once the waste is hauled out of state, Illinois EPA has jurisdiction. Collins also has the ability to discharge to other WPDES permitted facilities. Once the wastewater is discharged to these facilities, Collins is no longer responsible for the land application. Currently, Collins does not discharge into Department approved manure storage structures per s. NR 214.17(1), Wis. Adm. Code.

Management Plan

All land application practices are outlined under a Department approved land application management plan. Collins must submit an updated management plan for Department review and approval per the Schedules in the permit, and again prior to initiating any future changes in land application practices.

Land Application

All land application is restricted to Department approved sites/fields. To ensure the continued acceptability of land application sites that were previously approved, Collins must notify the DNR Basin Representative of site use for review and approval, prior to using a land application site for the first time during the term of the proposed permit. If DNR does not approve or deny the site within 7 business days after notification of the intent to use the site, Collins may apply waste to the site under the conditions of the previous approval. Upon future notification by DNR of the unacceptability of the site, Collins shall immediately discontinue use of the site (See the General Land Application Requirements section in the permit). Application rates are limited to the spreading restrictions shown in chs. NR 204 or NR 214 Wis. Adm. Code as applicable. Municipal sludge (biosolids) and mixed waste (industrial wastes and septage) winter-time application is prohibited.

1 Influent - Proposed Monitoring

1.1 Sampling Points

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
704		Inflow to storage from Client 605 (liquid industrial wastewater).
705		Inflow to storage from Client 607 (liquid industrial wastewater).
706		Inflow to storage from Client 603 (liquid industrial wastewater).
707		Inflow to storage from Client 601 (liquid industrial wastewater).
708		Inflow to storage from Client 606 (liquid industrial wastewater).
713		Inflow to storage from Client 602 (liquid industrial sludge).
714		Inflow to storage from Client 604 (liquid industrial wastewater).
715		Inflow to storage from Client 610 (liquid industrial wastewater).
716		Inflow to storage from Client 611 (liquid industrial wastewater).
717		Inflow to storage of residual wastewater from brown oil extraction process.
718		Inflow to storage from Tank A (liquid industrial wastewater).
719		Inflow to storage from Tank B (liquid industrial wastewater).
720		Inflow to storage from Client 613 (liquid industrial wastewater).
721		Inflow to storage from Client 614 (liquid industrial wastewater).
722		Inflow to storage from Confidential Client 615 food processing (liquid industrial wastewater).
723		Inflow to storage from Confidential Client 616 contaminated milk (liquid industrial wastewater).
724		Inflow to storage from Confidential Client 617 contaminated milk (liquid industrial wastewater).
725		Inflow to storage of waste activated cake sludge from Confidential Client 618 (food manufacturing).
726		Inflow from storage from Confidential Client 619 (liquid industrial wastewater).
727		Inflow to storage from Confidential Client 621(liquid industrial wastewater).
730		Inflow to storage of manure from non-CAFOs (Concentrated Animal Feeding Operations) as defined in ch. NR 243, Wis. Adm. Code.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
731		Inflow to storage from Confidential Client 622 (liquid industrial wastewater).
732		Inflow to storage of DAF sludge from Confidential Client 623 (food processing).
990		Inflow to storage of septic tank waste.
995		Inflow to storage of holding tank waste.
997		Inflow to storage of septage containing more than 25% grease interceptor waste.

1.2 New Waste Stream Requirements

No changes.

1.3 Monitoring Requirements

1.3.1 Sampling Point 995 - Inflow - Holding tank Waste; 990- Inflow - Septic Tank Waste, and 997- Inflow - Grease Trap Waste

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Measure	

No changes.

1.3.2 Sample Point Number: 704- Inflow Wastewater Client 605; 705- Inflow Wastewater Client 607; 706- Inflow Wastewater Client 603; 707- Inflow Wastewater Client 601; 708- Inflow Wastewater Client 606; 713- Inflow Wastewater Client 602; 714- Inflow Wastewater Client 604; 715- Inflow Wastewater Client 610; 716- Inflow Wastewater Client 611; 717- Inflow Brown Oil Extraction; 718- Inflow Wastewater from Tank A; 719- Inflow Wastewater from Tank B; 720- Inflow Wastewater Client 613; 721- Inflow Wastewater Client 614; 722- Inflow Wastewater Client 615; 723- Inflow Wastewater Client 616; 724- Inflow Wastewater Client 617; 726- Inflow Wastewater Client 619; 727- Inflow Wastewater Client 621; 730- Manure; 731- Inflow Wastewater Client 622, and 732- Inflow Sludge Client 623

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Measure	

Changes from Previous Permit:

732 – Influent Sludge Client 623, was added.

Explanation of Limits and Monitoring Requirements

This client was approved since the reissuance of this WPDES permit, in accordance with s. 1.2 of this permit.

All other subsections in “Section 1: Influent Requirements” remain the same and are not part of this modification. See previous fact sheet for more information on those conditions.

2 Land Application

2.1 Sampling Points

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
001		Land Application from Main Slurrystore , a 3.0 million gallon above ground slurrystore consisting of industrial wastes, septage wastes (septage, grease, holding tank waste) from a variety of clients and manure. Representative samples shall be collected from knife during land application. The tank contents are mixed prior to land application.
003		Land Application of liquid industrial wastewater from Client 606 (corn wash water).
004		Land Application from Leach Tank, a 0.8 million gallon above ground slurrystore consisting of industrial wastes from a variety of clients and manure. Representative samples shall be collected from knife during land application. The tank contents are mixed prior to land application.
005		Land Application of liquid industrial wastewater from Client 603 (poultry meat processing).
006		Land Application of liquid industrial sludge from Client 602 (food processing).
007		Land Application of liquid industrial wastewater from Client 603 (beef, swine, goat, elk, and buffalo meat processing).
008		Land Application of liquid industrial wastewater from Client 604 (rain water and fertilizer residual).
009		Land Application of liquid industrial wastewater from Client 605 (food product wash and process water) from Client 605.
010		Land Application of liquid industrial wastewater from Client 610 (beef meat processing).
011		Land Application from Tank A, a 1.2 million gallon steel above ground storage tank, located 550 ft south of the intersection of Clinton Rd and State line Rd. Tank contents will include industrial wastes, septage wastes, and animal manure.
012		Land Application from Tank B, a 0.8 million gallon steel above ground storage tank, located 550 ft. south of the intersection of Clinton Rd and State line Rd. Tank contents will include industrial wastes, septage wastes, and animal manure.
013		Land Application of industrial cake sludge from confidential client 618.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
014		Land Application of liquid industrial wastewater from confidential client 607.
015		Land Application of industrial food processing and septage wastes from the 5.5-million gallon Pipping concrete tank. The process for obtaining a representative sample shall be detailed in the land management plan. Location: 1N, 14E, Section 24, NW1/4, SW 1/4 (Industrial Liquid Waste, Industrial Liquid Sludge, Septage). PLACEHOLDER: DEPARTMENT APPROVAL TO ACTIVATE OUTFALL 015 MUST BE RECEIVED PRIOR TO USE.
200		Direct Land Application of Municipal Clients (PLACEHOLDER). DEPARTMENT APPROVAL TO ACTIVATE OUTFALL 200 MUST BE RECEIVED PRIOR TO USE.
220		Direct Land Application of Municipal Clients with Radium (PLACEHOLDER). DEPARTMENT APPROVAL TO ACTIVATE OUTFALL 220 MUST BE RECEIVED PRIOR TO USE.

2.2 Monitoring Requirements and Limitations

2.2.1 Sample Point Number: 001- Main Slurrystore; 011- Illinois Tank A; 012- Illinois Tank B, and 015- Pipping Tank (PH)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		mg/L	Monthly	Grab	Combined industrial liquid waste, industrial liquid sludge, and septage.
COD		mg/L	Monthly	Grab	
pH Field		su	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Phosphorus, Total		mg/L	Monthly	Grab	
Potassium, Total Recoverable		mg/L	Monthly	Grab	
Chloride		mg/L	Monthly	Grab	
Nitrogen, Ammonia Dissolved		mg/L	Monthly	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	

Changes from Previous Permit:

Sampling Point/Outfall 001's name has been changed from "Main Storage Tank" to "Main Slurrystore" to avoid confusion with the addition of the larger new Pipping Tank.

Sampling point/Outfall 015 has been added to this permit to track the landspreading of commingled septage and industrial food processing wastes from the department-approved "Pipping Tank". "PH" means placeholder.

Explanation of Limits and Monitoring Requirements

Monitoring requirements for the new storage tank are consistent with both existing monitoring requirements in the WPDES permit and for similar waste types for haulers across the State. This outfall has a placeholder to ensure that land application does not occur from this structure without department approval.

All other subsections in "Section 2: Land Application Requirements" remain the same and are not part of this modification. See previous fact sheet for more information on those conditions.

3 Compliance Schedules

3.1 Land Application Management Plan

Required Action	Due Date
Land Management Plan: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Section 2.3.6 of the permit (Operating Requirements/Management Plan), by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes.	03/01/2018
Land Management Plan Update: Update to Land Management Plan: The permittee shall submit an updated land management plan to the department to show compliance with section 2.4.4 of this permit. This update shall address any changes in operations as a result of the permit modification, in addition to any operational deficiencies as identified by the permittee or the department.	05/01/2021

Explanation of Compliance Schedules

In order to document how the new tank will be utilized and how operations will be impacted, the permittee must submit an update to the Land Management Plan to their DNR regulator within two months of the effective date of this modification.

Attachments:

Appendix A: Plan Approval Number S-2020-0798

Proposed Expiration Date:

12/31/2022 (unchanged)

Prepared By:

Nate Willis
Wastewater Engineer
Bureau of Water Quality

Date:

12/16/2020

cc:

Stephen Warrner, WDNR